

**IN THE CLAIMS:**

***Pl ase cancel claims 1-8.***

***Kindly add the following new claims 9-29:***

9. An apparatus for treating a waste gas containing fluorine-containing components, comprising:

a solids treating device for separating solids from a waste gas containing fluorine-containing components;

an addition device for adding to the waste gas leaving said solids treating device one of

(i) H and/or H<sub>2</sub>O, and

(ii) H and/or H<sub>2</sub>O and O<sub>2</sub>

as a decomposition assist gas;

a thermal decomposition device for thermally decomposing the waste gas to which the decomposition assist gas has been added, said thermal decomposition device being packed with  $\gamma$ -alumina to be heated to 500°C to 1000°C; and

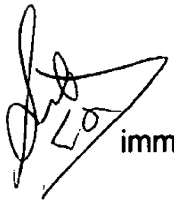
an acidic gas treating device for removing acidic gases from the thermally decomposed waste gas.

10. The apparatus according to claim 9, further comprising lines for interconnecting said solids treating device, said addition device, said thermal decomposition device and said acidic gas treating device.


11. The apparatus according to claim 10, further comprising an air ejector for controlling pressure in each of said solids treating device, said thermal decomposition device and said acidic gas treating device.

12. The apparatus according to claim 11, wherein at least one of said solids treating device and said acidic gas treating device comprises a water scrubber.

13. The apparatus according to claim 12, further comprising an analyzer for controlling emission density of treated gas exiting from said acidic gas treating device.

 14. The apparatus according to claim 13, wherein said analyzer is positioned either immediately upstream of or immediately downstream of said air ejector.

15. The apparatus according to claim 13, wherein said analyzer comprises an FT-IR analyzer.

 16. The apparatus according to claim 11, further comprising an FT-IR analyzer for monitoring treated gas exiting from said acidic gas treating device.

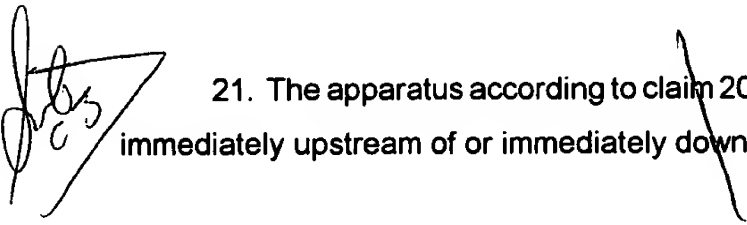
17. The apparatus according to claim 16, wherein said FT-IR analyzer is for monitoring the treated gas so as to control emission density of the treated gas.

18. The apparatus according to claim 16, wherein said FT-IR analyzer is positioned either immediately upstream of or immediately downstream of said air ejector.


19. The apparatus according to claim 16, further comprising:  
a supply line for supplying the waste gas into said solids treating device;  
a discharge line for carrying the treated gas from said acidic gas treating device;  
and  
a bypass interconnecting said supply line and said discharge line, said bypass having a bypass valve such that upon actuation of said bypass valve the waste gas is

conveyed from said supply line to said discharge line without entering said solids treating device.

20. The apparatus according to claim 11, further comprising an analyzer for controlling emission density of treated gas exiting from said acidic gas treating device.

 21. The apparatus according to claim 20, wherein said analyzer is positioned either immediately upstream of or immediately downstream of said air ejector.

22. The apparatus according to claim 20, wherein said analyzer comprises an FT-IR analyzer.

 23. The apparatus according to claim 9, wherein at least one of said solids treating device and said acidic gas treating device comprises a water scrubber.

24. The apparatus according to claim 9, further comprising an analyzer for controlling emission density of treated gas exiting from said acidic gas treating device.

25. The apparatus according to claim 24, wherein said analyzer comprises an FT-IR analyzer.

26. The apparatus according to claim 9, further comprising an FT-IR analyzer for monitoring treated gas exiting from said acidic gas treating device.

27. The apparatus according to claim 26, wherein said FT-IR analyzer is for monitoring the treated gas so as to control emission density of the treated gas.

28. The apparatus according to claim 9, further comprising:  
a supply line for supplying the waste gas into said solids treating device;  
a discharge line for carrying the treated gas from said acidic gas treating device;  
and  
a bypass interconnecting said supply line and said discharge line, said bypass having a bypass valve such that upon actuation of said bypass valve the waste gas is conveyed from said supply line to said discharge line without entering said solids treating device.

29. The apparatus according to claim 9, further comprising an air ejector for controlling pressure in each of said solids treating device, said thermal decomposition device and said acidic gas treating device.

---